



# Converting a Cannon

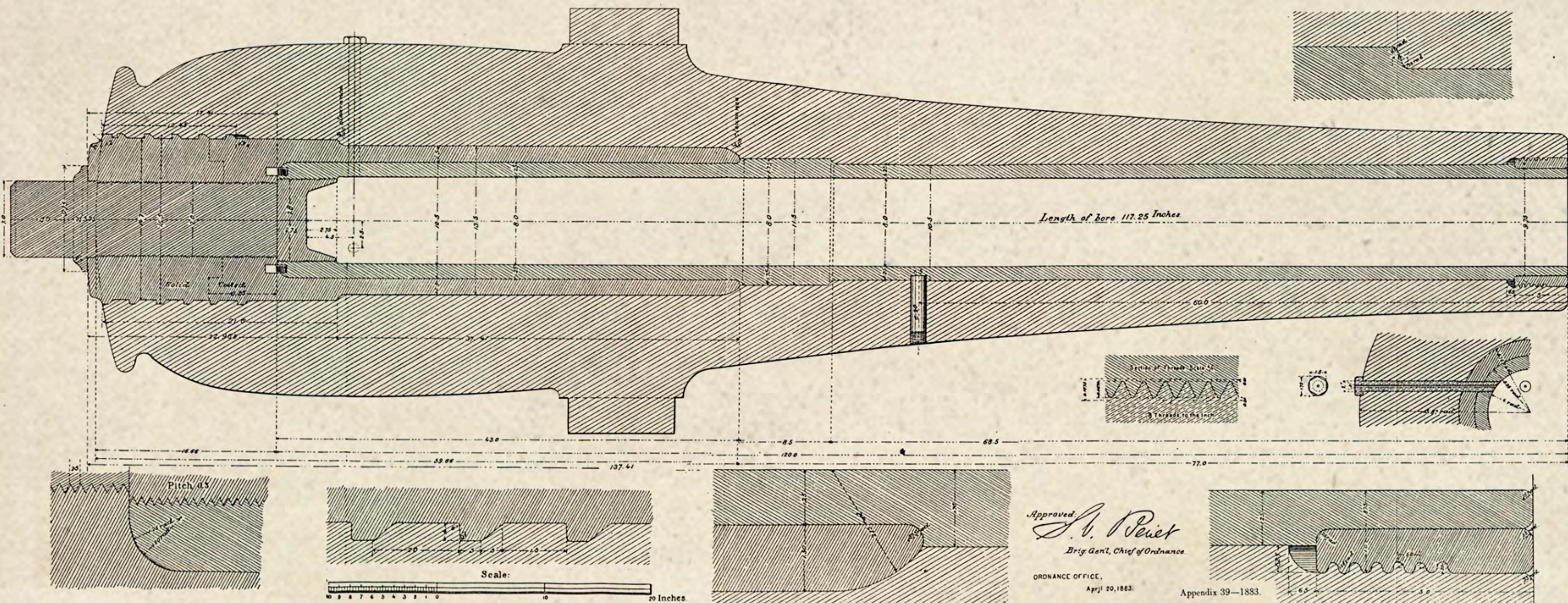
Feel the grooves inside this rare cannon barrel.  
This Rodman cannon was cast in 1861 as a 10-inch smoothbore, which fired round cannonballs. To keep up with current technology, the U.S. Army in 1884 inserted an 8-inch rifled sleeve into the old cast-iron barrel, because rifled guns had longer ranges than smoothbores. Steel later replaced cast iron, and the old guns were sold for scrap. The piece on the right is part of a smoothbore. The piece on the left is part of a rifled bore.



Rifled barrel inside a smoothbore

## Keep off the Cannon

For your safety and to help preserve this historic cannon, do not climb on the gun barrel.



8-INCH RIFLE-(CONVERTED)  
BREECH INSERTION.

Rifling.  
Twist, uniform, one turn in 30 feet.  
Number of lands and grooves.....24 of each.  
Width of lands.....0.349 inch.  
Width of grooves.....0.692 inch.  
Depth of grooves.....0.075 inch.



# Finishing Fort Drewry

Immediately after the battle, men of Chesterfield County's own Southside Artillery, along with others, worked to strengthen the fort. The section before you was likely their first project. Eventually the earthworks around you formed an enclosed fort, armed with as many as eight large guns. Although the defenses at Drewry's Bluff became more and more powerful, the fort never fired another shot in anger.

This 1865 photograph was made from where you now stand. The Union soldier rests in the doorway of a "bombproof" that provided shelter during heavy bombardment. The fort's well and hand pump are visible in the foreground. The bombproof and well have long since collapsed, and the gun position to the right now stands vacant.

*"Don't a man leave for the quarters, for I want you to fix up these parapets that have been knocked down, and those sand-bags torn to pieces must be replaced and get ready for them, for the boats will probably be back here again in two hours."*

Capt. Augustus Drewry, commanding Southside Artillery, quoted by Sgt. Samuel A. Mann



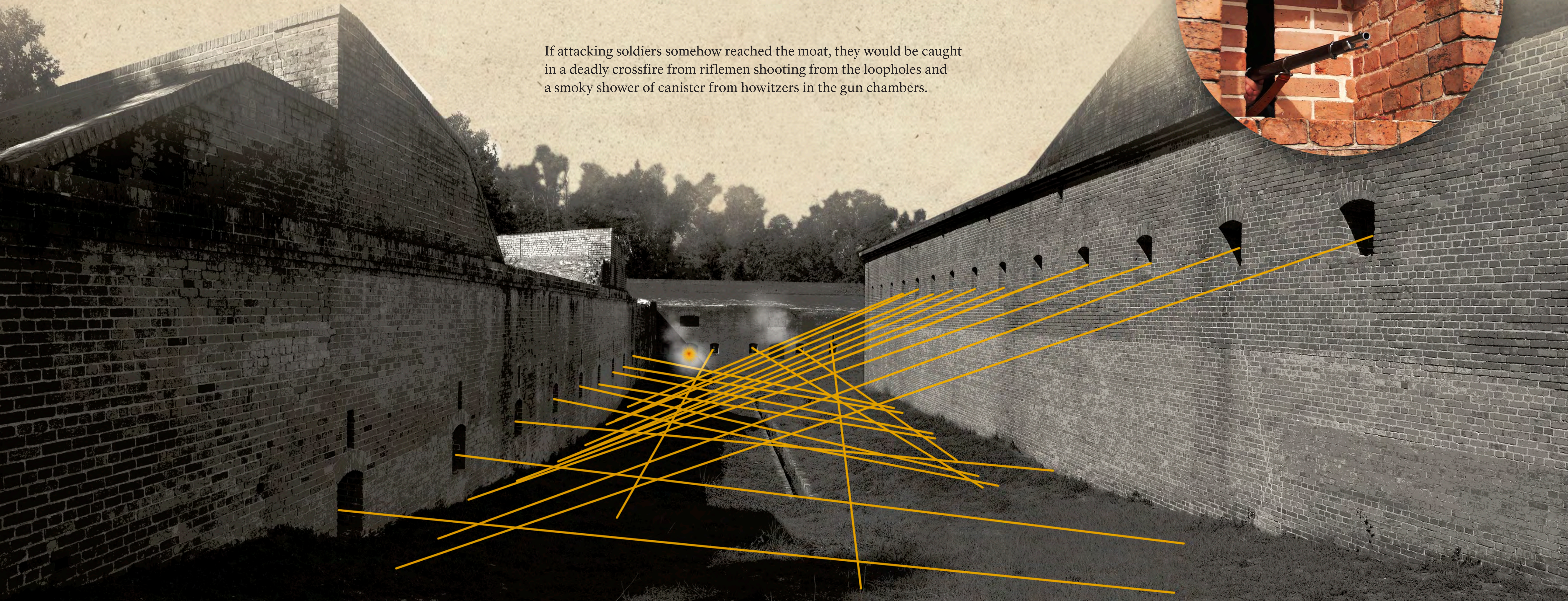
# Deadly Crossfire

Advanced Redoubt presented a series of obstacles to exhaust attackers before they could reach the Pensacola Navy Yard: long-range cannon fire, short-range infantry fire from the outer wall, and intricate crossfire between the outer and inner walls. About the only way the enemy could take the fort was with a siege. Despite its design innovations,

Advanced Redoubt marked the end of an era in coastal fortifications. Begun in 1845 with enslaved workers, the fort was completed in 1870 by free citizens. Its masonry walls, filled with cement, marked a transition to reinforced concrete batteries that could resist rifled cannon more effectively than brick.

From narrow protective loopholes, riflemen could fire across the moat.

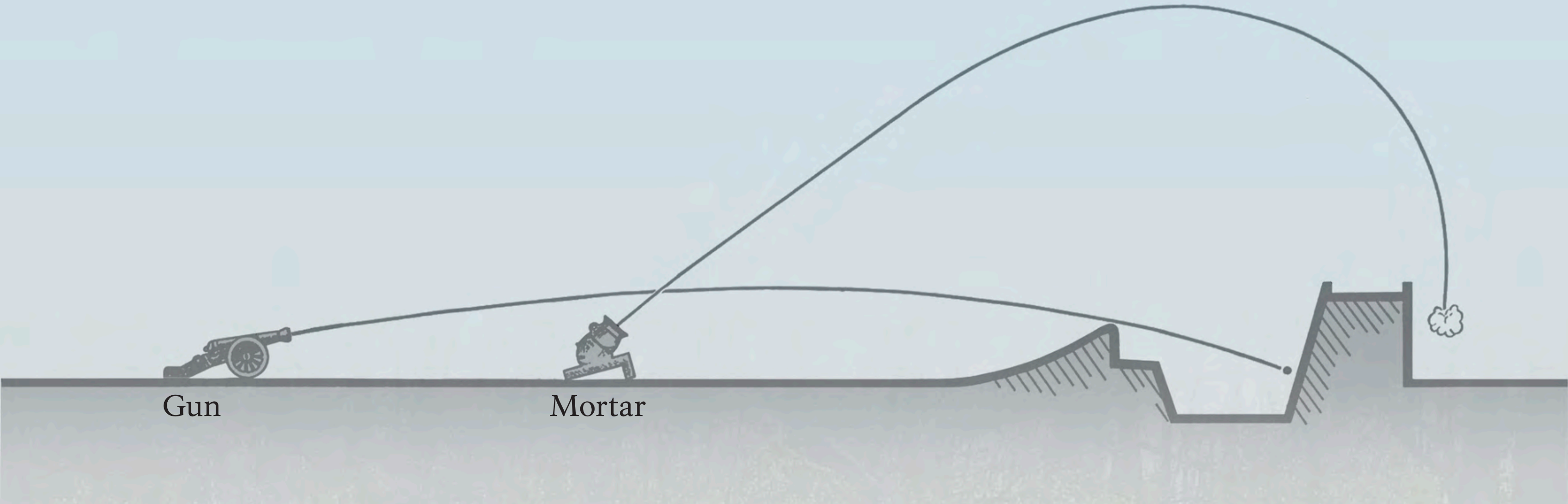
If attacking soldiers somehow reached the moat, they would be caught in a deadly crossfire from riflemen shooting from the loopholes and a smoky shower of canister from howitzers in the gun chambers.



# Muzzle-Loading Artillery

The first forts on this site were armed with smoothbore, muzzle-loading cannon like the ones displayed here. Long cannon, commonly called guns, fired low at walls and sides of ships. The short cannon here, called mortars, fired high over walls.

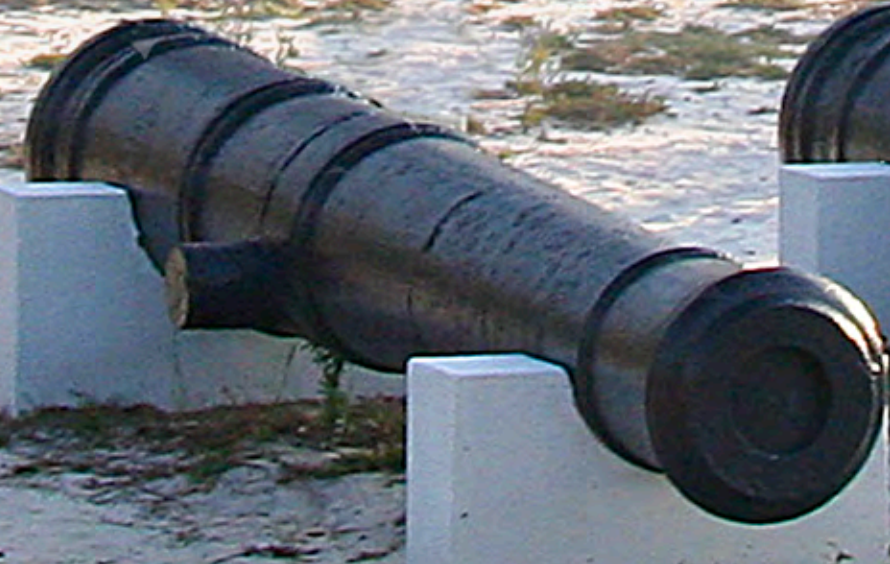
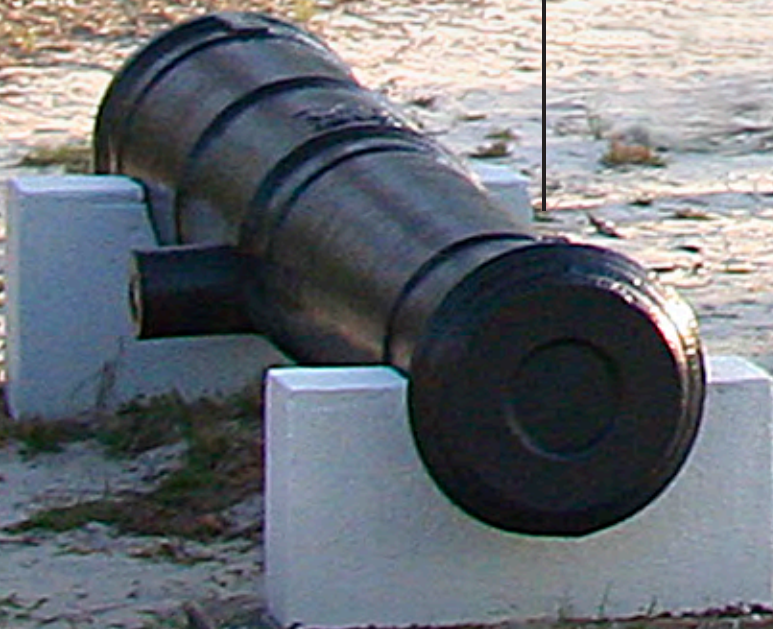
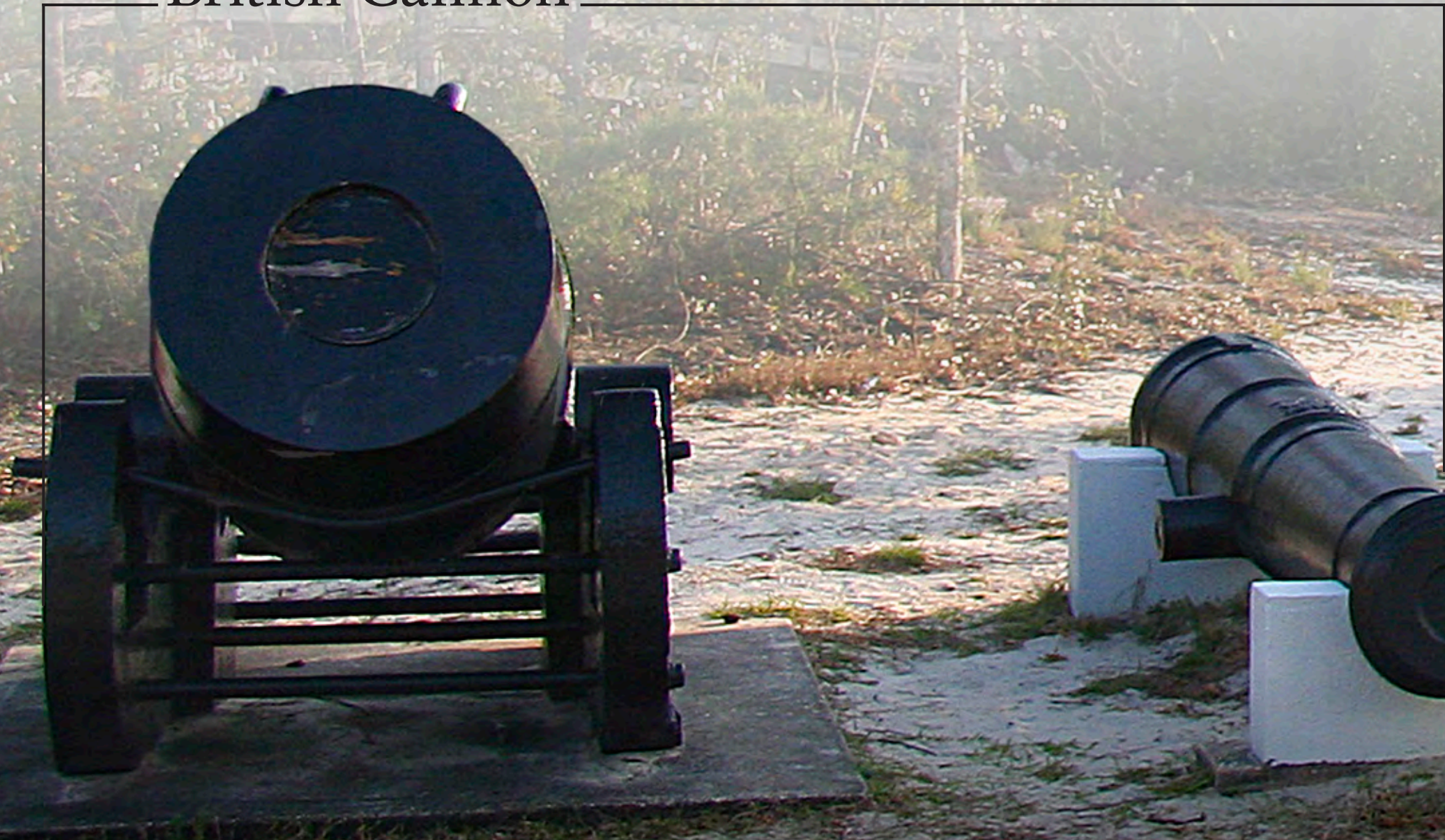
They were used to lob explosive cannon balls into forts and onto ships. Smoothbore cannon were in use for nearly 700 years. They were replaced by rifled cannon during the mid-1800s.



British Cannon

Spanish Cannon

French Cannon



13-inch mortar, 1800s

24-pounder gun, 1700s

Two 24-pounder guns, 1700s

16-pounder gun, 1700s

13-inch mortar, 1700s